

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A cancellation server of a digital delivery system, the cancellation server communicatively coupled to at least one database, and configured for executing the steps of:
 - receiving an identifier associated with a cryptographic puzzle, the puzzle being attached to a digital object, the digital object being an electronic mail message intended for delivery from a sender to a recipient distinct from the sender;
 - validating the identifier by verifying that the identifier does not exist in the at least one database; and
 - upon validating, canceling the cryptographic puzzle and storing in the at least one database, an entry comprising the identifier or information derived from the identifier, and transmitting to the recipient an ACCEPT response if the identifier is validated.
2. (Canceled)
3. (Previously Presented) The cancellation server of claim 1 further executing the step of transmitting to the recipient, a REJECT response if the identifier is not validated.
4. (Previously Presented) The cancellation server of claim 1 wherein the server is further configured for executing the step of receiving a timestamp associated with the cryptographic puzzle, and storing in the at least one database, if the identifier is validated, the timestamp or information derived from the timestamp.
5. (Previously Presented) The cancellation server of claim 4 further executing the step of causing an entry to be removed from the database if the timestamp falls outside a threshold range.

6. (Previously Presented) The cancellation server of claim 1 wherein verifying that the identifier does not exist in the at least one database comprises computing a hash of the identifier.
7. (Previously Presented) The cancellation server of claim 6 wherein the identifier is hashed according to a range of values for a peer-to-peer distributed lookup service.
8. (Previously Presented) The cancellation server of claim 1 communicatively coupled to a second cancellation server for providing data stored in the at least one database to the second cancellation server.
9. (Previously Presented) The cancellation server of claim 1 communicatively coupled to a second cancellation server for querying an additional database associated with the second cancellation server.
10. (Original) The cancellation server of claim 9 wherein the cancellation server and the second cancellation server communicate through a peer-to-peer network.
11. (Canceled)
12. (Currently Amended) A puzzle checker for use in a digital delivery system, the puzzle checker communicatively coupled with a cancellation server, and configured for executing the steps of:
 - transmitting to the cancellation server, an identifier associated with a cryptographic puzzle, the puzzle being attached to a digital object, the digital object being an electronic mail message intended for delivery from a sender to a recipient distinct from the sender, the puzzle checker being associated with the recipient;
 - receiving a REJECT response from the cancellation server as a result of the identifier being already present in a database of the cancellation server; and
 - processing the digital object in response to receiving the REJECT response by altering an attribute associated with the digital object such that the digital object is not

forwarded to the receiver as if an ACCEPT response were received from the cancellation server.

13. (Original) The puzzle checker of claim 12 wherein processing the digital object comprises removing the digital object.
14. (Original) The puzzle checker of claim 12 wherein processing the digital object comprises marking the digital object for subsequent filtering.
15. (Original) The puzzle checker of claim 12 wherein processing the digital object comprises modifying the priority of the digital object.
16. (Previously Presented) The puzzle checker of claim 12 further executing the steps of:
verifying whether a solution solves the puzzle, and
processing the digital object if the solution does not solve the puzzle.
17. (Previously Presented) The puzzle checker of claim 12 further executing the steps of
confirming whether a timestamp associated with the cryptographic puzzle is within a
threshold range; and generating the REJECT response if the timestamp is outside the
threshold range.
18. (Previously Presented) The puzzle checker of claim 12 further executing the step of:
computing a hash of the identifier;
wherein the transmitting step further comprises transmitting the hash of the
identifier to the cancellation server.
19. (Previously Presented) The puzzle checker of claim 12 wherein the puzzle checker is
located in a recipient computer.
20. (Previously Presented) The puzzle checker of claim 12 wherein the puzzle checker is
located an intermediary server.

21-27 (Canceled)

28. (Currently Amended) A method for using a cryptographic puzzle attached to a digital object for delivery from a sender to a recipient distinct from the sender through a digital delivery system, the digital object being an electronic mail message, the method comprising the steps of:
- receiving an identifier associated with the cryptographic puzzle, the puzzle being attached to the digital object as sent by the sender;
 - validating the identifier by verifying that the identifier does not already exist in a database; and
 - upon validating, canceling the cryptographic puzzle and storing in the database, the identifier or information derived from the identifier, and transmitting to the recipient an ACCEPT response.
29. (Previously Presented) The method of claim 28 further comprising the step of receiving a timestamp associated with the cryptographic puzzle, and upon validating, storing in the database, the timestamp or information derived from the timestamp.
30. (Original) The method of claim 29 further comprising the step of causing an entry to be removed from the database if its timestamp falls outside a threshold range.
31. (Previously Presented) The method of claim 28 further comprising the step of transferring data from the database to a second database.
32. (Previously Presented) The method of claim 28 validating the identifier further comprises querying a second database.
33. (Previously Presented) The method of claim 32 wherein the two databases are part of a peer-to-peer network.

34. (Previously Presented) The method of claim 28 wherein the identifier is hashed to a value within a predefined range of values.
35. (Canceled)
36. (Currently Amended) A computer-readable storage medium, having stored thereon, computer-executable instructions for executing the steps of:
- validating an identifier associated with a cryptographic puzzle by verifying that the identifier does not already exist in a database, the cryptographic puzzle being attached to a digital object for delivery from a sender to a recipient distinct from the sender through a digital delivery system, the digital object being an electronic mail message, the puzzle being attached to the digital object as sent by the sender;
 - upon validating, canceling the cryptographic puzzle that is attached to a digital object; [[and]]
 - storing in the database, a new entry comprising the identifier or information derived from the identifier; and
 - transmitting to the recipient an ACCEPT response.